

Decision Package Detail

Department 04 Legislative Branch

10/25/10

Contact: Susan Fox or Hank Trenk for details

Program: 20 - Legislative Services Division	DP Type: NP	DP Status:
DP Description: Legislative Branch Capital IT Project		

Funding Request

	2013 Biennium	2015 Biennium
01100 General Fund	Replacement, upgrade and consolidation of legislative systems supporting \$ 4,687,500	\$ 1,287,500
	MCA production, Bills & Amendment processing, Journals and Minutes	
	Total Project Cost \$ 5,975,000	

Description and Justification

Introduction and Background: The Computer System Plan adopted by the Legislative Council each biennium identifies information technology systems that are at or near obsolescence and need replacement. Identified in the plan adopted by the Council this year are systems that support critical business processes of the Legislative Branch (Branch) and that, because of their declining status, place legislative processes at risk.

In the Legislative Services Division (LSD) the systems identified as at-risk support bill drafting, the engrossing and enrolling of bills, amendment processing, House and Senate journal creation and committee minutes, and update of the Montana Code Annotated with new laws enacted each session. In the Legislative Fiscal Division (LFD) at-risk systems support revenue projection, analysis, and production of publications.

Though operationally stable, some of the systems are based on designs and underlying technology that is up to 25 years old. Examples of the underlying technology include TextDBMS, Lotus Approach, Microsoft Access, Power Builder, and WordPerfect. In some cases, the technologies are nearing the point where they cannot be supported because training is difficult to find and few programming staff understand the technologies. In other cases, the technology is no longer robust enough to accommodate business requirements. In a few cases, systems have been created and supported by individual staff members who are nearing retirement and whose knowledge must be incorporated into replacement systems and processes.

Analyses of Need:

1. During the 2011 interim, the Branch contracted for an analysis of LSD's at-risk infrastructure and business processes. The analysis identified major project components that will provide significant system integration and improvement, and remediate pressing risks. In addition, the analysis recommended an implementation schedule, considering the 20-month legislative interim between sessions, and identified costs related to each project component. The final analysis recommended a 4-year (2 biennium) project to replace the systems at a total cost of \$5.975 million (\$4,687,500 in the 2013 biennium; \$1,287,500 in the 2015 biennium).

2. A similar analysis of the LFD's at-risk systems has been initiated by internal staff. Development of a strategy and assessment of accurate replacement costs need further analysis. No funding request is being presented for the 2013 biennium.

Funding Options:

1. HB 5 or HB 10 funding for project components that can properly be designated as capital improvements (allows 4-year time frame.)
2. General Fund appropriation for 2 bienniums.
3. General Fund transfer to the Branch IT Reserve account (allows for a 4-year time frame.)

Decision Package Detail	
Department: 1104 Legislative Branch	
10/25/10	
Contact: Susan Fox or Hank Trenk for details	

Program: 20 - Legislative Services Division	DP Type: NP	DP Status:
DP Description: Legislative Branch Capital IT Project		

The Montana (MT) Legislature's technology infrastructure is aging and at risk. Some of the core systems are nearing obsolescence. Others are operationally stable, but are based on designs that are at least 10 years old (and some much older). Action is needed soon to avoid significant problems.

This document describes projects that will provide significant improvements and remediate several pressing risks. These projects are described in a list of major and minor recommended improvements (attached). This document describes the 8 major projects that deliver the most benefit or address known risks.

Process Analysis: This plan is the result of an extensive review of existing processes and systems in use throughout the Montana Legislature.

Several process analysis sessions were conducted with key stakeholders from various areas to document the existing process and find opportunities for process improvement. The resulting process descriptions and diagrams were reviewed and edited extensively for accuracy. They will be the basis for future proposed process design activity and system development planning.

Systems Analysis: All systems and platforms in use in the legislature to support these processes were evaluated for suitability to the process, age of the tools, advantages and limitations of the tools, and cost of using them.

Key systems that need replacing include the TextDBMS system on the mainframe, and the use of WordPerfect & Perfect Script for document preparation. These are aging systems that may not be supported in the near future and where better tools exist today. Several support tools (e.g., queries, OmniMark, etc.) need upgrading as well, to work with new repository databases and technology. Unification of the Oracle databases within LAWS Status system and web servers used for Public access could provide financial savings as well from hosting cost reductions.

Key systems that work well or are current and need not be replaced include the AV Streaming and the Vote systems. The Oracle-based LAWS Status system will benefit from some reconfiguration and minor enhancements.

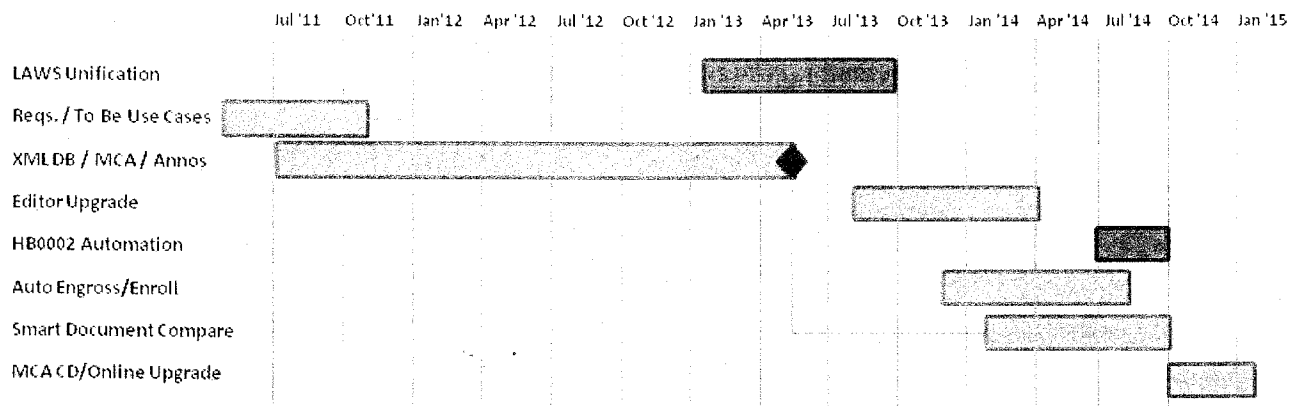
The projects described below address all the major recommendations from both the process and systems evaluations efforts. They have been identified as high priority projects due to risks of aging systems and opportunities with new tools and approaches to text processing.

To complete all of the work described in these projects will require 3 to 4 calendar years. Timing of

project activity must be coordinated with legislative activity and resource availability. In order to complete this development in time for use in the 2015 session, it is imperative that work begin as soon as possible, or these systems may not be ready until the next biennium's window of opportunity (see chart below). If no work occurs on these projects in 2011, the current systems will not be entirely replaced until the 2017 session or later – this creates significant obsolescence and cost risk.

The projects are described as stand-alone efforts, but have some dependencies between them. These descriptions represent a program of activity and deliverables that may occur over the next 3 to 4 years. Some of these projects can be done earlier to familiarize staff with the technology, explore and prototype approaches, and to build the beginnings of the entire platform that will ultimately be developed with the completion of the TextDBMS Replacement / XML (Extensible Markup Language) Database project.

Below is a timeline for the 8 major projects recommended as part of the MT Session Systems Analysis Project. The chart shows a possible schedule for each and some relationships and dependencies between these projects. The solid line indicates a dependency.



Export / Load Summary - Detailed Project Data

Project	PM	Analyst	DBA	Coder	Tester	FTE Mos	Est. \$
Reqs. / Process design	1.75	14.00	-	-	-	15.75	\$ 393,750
XML Repository / MCA / Annos	12.50	36.50	12.00	72.00	20.50	153.50	\$ 3,837,500
Laws Database Unification	1.75	3.00	3.50	8.00	2.00	18.25	\$ 456,250
Editor Upgrade	1.50	4.00	-	6.00	1.00	12.50	\$ 312,500
HB2 Automation	1.00	2.00	-	2.00	1.50	6.50	\$ 162,500
Auto Engrossing / Enrolling	1.50	3.00	-	6.00	3.00	13.50	\$ 337,500
Smart Document Compare	1.50	3.00	-	6.00	3.00	13.50	\$ 337,500
MCA Online/CD-ROM Upgrade	0.50	1.00	-	3.00	1.00	5.50	\$ 137,500
Total	20.25	52.50	15.50	103.00	32.00	239.00	\$ 5,975,000

Mo / Yr 12

FTE Yrs 19.92

FTE / Yr 300000

Net **\$ 5,975,000**

FTE Mo\$ \$ 25,000

Legislative Services Division Systems Analysis Project

Key Findings and Recommendations

Introduction

The Montana (MT) Legislature's technology infrastructure is aging and at risk. Some of the core systems are nearing obsolescence. Others are operationally stable, but are based on designs that are at least 10 years old (and some much older). Action is needed soon to avoid significant problems.

This document describes projects that will provide significant improvements and remediate several pressing risks. These projects are described in a list of major and minor recommended improvements (attached). This document describes the 8 major projects that deliver the most benefit or address known risks.

How this Plan was Developed

Process Analysis: This plan is the result of an extensive review of existing processes and systems in use throughout the Montana Legislature.

Several process analysis sessions were conducted with key stakeholders from various areas to document the existing process and find opportunities for process improvement. The resulting process descriptions and diagrams were reviewed and edited extensively for accuracy. They will be the basis for future proposed process design activity and system development planning.

Systems Analysis: All systems and platforms in use in the legislature to support these processes were evaluated for suitability to the process, age of the tools, advantages and limitations of the tools, and cost of using them.

Key systems that need replacing include the TextDBMS system on the mainframe, and the use of WordPerfect & Perfect Script for document preparation. These are aging systems that may not be supported in the near future and where better tools exist today. Several support tools (e.g., queries, OmniMark, etc.) need upgrading as well, to work with new repository databases and technology. Unification of the Oracle databases within LAWS Status system and web servers used for Public access could provide financial savings as well from hosting cost reductions.

Key systems that work well or are current and need not be replaced include the AV Streaming and the Vote systems. The Oracle-based LAWS Status system will benefit from some reconfiguration and minor enhancements.

The projects described below address all the major recommendations from both the process and systems evaluations efforts. They have been identified as high priority projects due to risks of aging systems and opportunities with new tools and approaches to text processing.

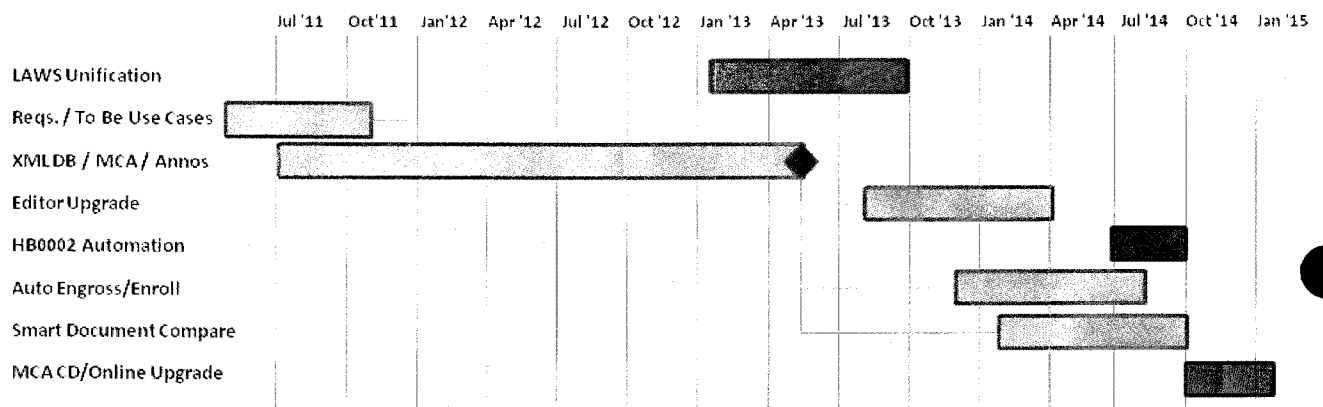
Proposed Project Schedules

To complete all of the work described in these projects will require 3 to 4 calendar years. Timing of

project activity must be coordinated with legislative activity and resource availability. In order to complete this development in time for use in the 2015 session, it is imperative that work begin as soon as possible, or these systems may not be ready until the next biennium's window of opportunity (see chart below). If no work occurs on these projects in 2011, the current systems will not be entirely replaced until the 2017 session or later – this creates significant obsolescence and cost risk.

The projects are described as stand-alone efforts, but have some dependencies between them. These descriptions represent a program of activity and deliverables that may occur over the next 3 to 4 years. Some of these projects can be done earlier to familiarize staff with the technology, explore and prototype approaches, and to build the beginnings of the entire platform that will ultimately be developed with the completion of the TextDBMS Replacement / XML (Extensible Markup Language) Database project.

Below is a timeline for the 8 major projects recommended as part of the MT Session Systems Analysis Project. The chart shows a possible schedule for each and some relationships and dependencies between these projects. The solid line indicates a dependency.



Effort / Costs for Recommended Projects

Project	PM	Analyst	DBA	Coder	Tester	FTE Mos	Est. \$
Reqs. / Process design	1.75	14.00	-	-	-	15.75	\$ 393,750
XML Repository / MCA / Annos	12.50	36.50	12.00	72.00	20.50	153.50	\$ 3,837,500
Laws Database Unification	1.75	3.00	3.50	8.00	2.00	18.25	\$ 456,250
Editor Upgrade	1.50	4.00	-	6.00	1.00	12.50	\$ 312,500
HB2 Automation	1.00	2.00	-	2.00	1.50	6.50	\$ 162,500
Auto Engrossing / Enrolling	1.50	3.00	-	6.00	3.00	13.50	\$ 337,500
Smart Document Compare	1.50	3.00	-	6.00	3.00	13.50	\$ 337,500
MCA Online/CD-ROM Upgrade	0.50	1.00	-	3.00	1.00	5.50	\$ 137,500
Total	20.25	52.50	15.50	103.00	32.00	239.00	\$ 5,975,000

Mo / Yr 12
FTE Yrs 19.92
FTE / Yr 300000
Net **\$ 5,975,000**
FTE Mo\$ \$ 25,000

Decision Package Detail

Department 04 Legislative Branch

10/25/10

Contact: Susan Fox or Hank Trenk for details

Program: 20 - Legislative Services Division

DP Type: NP

DP Status:

DP Description: Legislative Branch Capital IT Project

Funding Request

	2013 Biennium	2015 Biennium
01100 General Fund	Replacement, upgrade and consolidation of legislative systems supporting \$ 4,687,500	\$ 1,287,500
	MCA production, Bills & Amendment processing, Journals and Minutes	
	Total Project Cost	
	\$ 5,975,000	

Description and Justification

Introduction and Background: The Computer System Plan adopted by the Legislative Council each biennium identifies information technology systems that are at or near obsolescence and need replacement. Identified in the plan adopted by the Council this year are systems that support critical business processes of the Legislative Branch (Branch) and that, because of their declining status, place legislative processes at risk.

In the Legislative Services Division (LSD) the systems identified as at-risk support bill drafting, the engrossing and enrolling of bills, amendment processing, House and Senate journal creation and committee minutes, and update of the Montana Code Annotated with new laws enacted each session. In the Legislative Fiscal Division (LFD) at-risk systems support revenue projection, analysis, and production of publications.

Though operationally stable, some of the systems are based on designs and underlying technology that is up to 25 years old. Examples of the underlying technology include TextDBMS, Lotus Approach, Microsoft Access, Power Builder, and WordPerfect. In some cases, the technologies are nearing the point where they cannot be supported because training is difficult to find and few programming staff understand the technologies. In other cases, the technology is no longer robust enough to accommodate business requirements. In a few cases, systems have been created and supported by individual staff members who are nearing retirement and whose knowledge must be incorporated into replacement systems and processes.

Analyses of Need:

1. During the 2011 interim, the Branch contracted for an analysis of LSD's at-risk infrastructure and business processes. The analysis identified major project components that will provide significant system integration and improvement, and remediate pressing risks. In addition, the analysis recommended an implementation schedule, considering the 20-month legislative interim between sessions, and identified costs related to each project component. The final analysis recommended a 4-year (2 biennium) project to replace the systems at a total cost of \$5.975 million (\$4,687,500 in the 2013 biennium; \$1,287,500 in the 2015 biennium).

Exhibit N
ate
ill
N

2. A similar analysis of the LFD's at-risk systems has been initiated by internal staff. Development of a strategy and assessment of accurate replacement costs need further analysis. No funding request is being presented for the 2013 biennium.

Funding Options:

1. HB 5 or HB 10 funding for project components that can properly be designated as capital improvements (allows 4-year time frame.)
2. General Fund appropriation for 2 bienniums.
3. General Fund transfer to the Branch IT Reserve account (allows for a 4-year time frame.)

3

4-1-11

HB5

Decision Package Detail

Department: 1104 Legislative Branch

10/25/10

Contact: Susan Fox or Hank Trenk for details

Program: 20 - Legislative Services Division

DP Type: NP

DP Status:

DP Description: Legislative Branch Capital IT Project